

REMARKS

The present application relates to hybrid maize plant and seed 39J26. Claims 1-32 are currently pending in the present application. Applicants respectfully request consideration of the following remarks.

Detailed Action

A. Specification

The Examiner acknowledges Applicants' statement regarding the deposit of biological material on page 3 of the Remarks filed May 15, 2002. Applicants herein are submitting amendments to claims 1, 5, and 7 and to the Specification on pages 7 and 37 to include the proper ATCC accession numbers. Applicants submit that at least 2,500 seeds of Variety 39J26 have been deposited with the ATCC on May 3, 2002 (proprietary inbred maize lines GE515243, May 6, 2002; and GE515344, May 13, 2002). In view of these deposits, the rejections under 35 U.S.C. § 112, first paragraph should be removed (MPEP § 2411.02). Such action is respectfully requested.

Applicants acknowledge that the rejection of claims 11, 15, 19, 24, 28 and 32 under 35 U.S.C. § 112, second paragraph have been withdrawn by the Examiner in view of Applicants' arguments.

Applicants further acknowledge that the rejection of claims 16-19 under 35 U.S.C. § 112, first paragraph, for enablement has been withdrawn in view of Applicants' arguments on pages 5-8 of the Remarks.

B. Claim Objections

The Examiner objects to claims 1-4, 5, 7, and 20 for the following informalities. The Examiner objects to claims 1, 5 and 7 for the ATCC accession number being left blank. Applicants have amended the claims to include the ATCC accession number, thereby alleviating this objection.

The Examiner objects to claim 20, line 1, for the phrase "all the morphological". Applicants have now amended the claim to read --all of the morphological--, as suggested by the Examiner, thereby alleviating this rejection.

The Examiner objects to claim 6 for the use of "A". Applicants have now amended claim 6 to include --The-- as suggested by the Examiner, thereby alleviating this objection.

The Examiner also objects to claims 12, 16, 25 and 29 for the phrase "A hybrid maize plant". Applicants have now amended these claims to read --The hybrid maize plant-- as suggested by the Examiner, thereby alleviating this objection.

C. Claims

Applicants acknowledge the addition of new claims 33 through 41. The new claims do not add new matter as there is literal support for the claims in the originally filed specification (pages 23-31, specification).

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 5-11, 13-15, 17-19, 21-24, 26-28 and 30-32 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 5 stands rejected for the phrase "tissue regenerates" lacking proper antecedent basis in the claim. Applicants have now amended claim 5 to cancel the phrase "tissue regenerates", thereby alleviating this rejection.

Claims 5, 7, 11, 15, 19, 24, 28 and 32 stand rejected for the phrase "capable of expressing". Applicants respectfully traverse this rejection. The term is not indefinite and would be understood by one skilled in the art to mean the ability to manifest the morphological and physiological characteristics. In addition, Applicants assert that plants regenerated from tissue culture may be stunted and have other changes in growth habit, but once the Hybrid 39J26 regenerated plant is self-pollinated and the seed is grown under normal growing conditions, the plant will again express the same traits as Hybrid 39J26. Applicants have deleted the term in claim 5, thereby alleviating the rejection. Applicants assert claims 5, 7, 11, 15, 19, 24, 28 and 32 are in condition for allowance.

Claim 6 stands rejected for the phrase "the cells or protoplasts being from a tissue" as it is indefinite because it is unclear what the metes and bounds of "being from" are. Applicants have now amended claim 6 to read --the cells or protoplasts of said cells having been isolated from a tissue--, as suggested by the Examiner thereby, alleviating this rejection.

Claim 8 stands rejected as indefinite because the plant of claim 2 is not male sterile. Applicants have now amended the claim to read --further comprises a genetic factor conferring male sterility--, as suggested by the Examiner, thereby obviating this rejection.

Claims 9, 13, 17, 22, 26 and 30 stand rejected as indefinite because the claims do not set forth any positive method steps leading to the maize plant at line 1 of the claims. Applicants respectfully submit the claims are directed to a method for producing a maize plant wherein the maize plant of claim 2, or its parts, is used as a source of plant breeding material. This method clearly defines a method utilizing the proprietary hybrid 39J26 to produce a maize plant. The techniques described in the present application in the "Background of the Invention" (pages 1-7) and "Further Embodiments of the Invention" (pages 23-35) sections clearly define and distinctly claim positive method steps for producing maize plants for small or large scale production. Applicants respectfully request the Examiner to withdraw this rejection.

Claims 10, 14, 18, 23, 27, and 31 are indefinite for improper antecedent basis. The Examiner states the claims are drawn to a "maize plant breeding program" while the claims to which they depend are drawn to a method. Applicants have amended the claims in accordance to Examiner's suggestion by changing the recitation "maize plant breeding program" in line 1 of claims 10, 14, 18, 23, 27 and 31 with --method--, thus alleviating this rejection.

Claims 11, 15, 19, 24, 28 and 32 are indefinite in their recitation of "excellent silage yield potential", "excellent grain yield potential", "excellent seedling vigor" and "excellent starch content of the whole plant", as the Examiner states these terms are relative and do not state the metes and bounds of the claimed invention.

Applicants respectfully traverse this rejection. Each of these claims recites two requirements, first that 39J26 be an ancestor of the plant and second, that the claimed plant be "capable of expressing a combination of at least two 39J26 traits" selected from a Markush grouping. Applicants note that the Markush listing is directed to "39J26" traits. Thus, Applicants submit that the recitation of 39J26 traits clearly delineates the traits listed as those which are from 39J26 or ancestors thereof. The recitation of "39J26" in front of the term traits clearly indicates that the traits must be originating from 39J26. This is particularly so since the claim also requires that the plant 39J26 must be an ancestor of the claimed plant. Applicants further submit that the adjectives used within the claims are not unduly narrative or imprecise as

they do clearly characterize and positively recite the degree of expression of the particular traits within the application in Tables 1-4 (pages 16-22). This terminology is well known in the art and commonly used within breeding techniques of hybrid plants. In addition, Applicants assert it is exactly clear what states or geographic areas define these regions and would be understood to one skilled in the art. Applicants respectfully submit that this language is not indefinite and would be understood by one in the art and is the terminology of use within the art. Therefore, Applicants respectfully request reconsideration.

Furthermore, in Georgia-Pacific, the Federal Circuit stated that "...the policy of the patent statute contemplates granting protection to valid inventions, and this policy will be defeated if protection were to be accorded to those patents which were capable of precise definition." Georgia-Pacific Corp. v. U.S. Plywood Corp., 258 F.2d 124, 136, 118 U.S.P.Q. 122 (2nd Cir.). While some decisions have advocated the general statement that "[a]n invention must be capable of accurate definition, and it must be accurately defined, to be patentable, (See United Carbon Co. v. Binney & Smith Co., 1942, 317 U.S. 228, 237, 63 S.Ct. 165, 170, 87 L.Ed. 232), the Federal Court has stated that "such general statements, however, must be viewed in the context of circumstances. Objectionable indefiniteness must be determined by the facts in each case, not by reference to an abstract rule." Georgia-Pacific at 136. "Patentable inventions cannot always be described in terms of exact measurements, symbols and formulae, and Applicants necessarily must use the meager tools provided by language, tools which admittedly lack exactitude and precision. If the claims read in light of the specification, reasonably apprise those skills in the art both in utilization and scope of the invention, and if the language is as precise as the subject matter permits, the courts can demand no more." Id. (See North American Vaccine Inc. v. American Cyanamide Co., 7 F.3d 1571, 28 U.S.P.Q.2d 1333, 1339 (Fed. Cir. 1993)). Moreover, it is against the policy of the patent statute to bar patent protection for inventions that are incapable of precise definition. Georgia-Pacific at 136. With respect to the above-mentioned terms, the claims are as precise as the subject matter of the invention permits. Therefore, Applicants respectfully request reconsideration of the claims.

Claim 21 stands indefinite because the plant of claim 20 is not male sterile. Applicants have now amended claim 21 to read --further comprises a genetic factor conferring male sterility-- , as suggested by the Examiner, thereby obviating this rejection.

In light of the above remarks, Applicants submit that claims 5-11, 13-15, 17-19, 21-24, 26-28 and 30-32 clearly define and distinctly claim the subject matter Applicants regard as the invention. Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 11, 12, 15, 16, 19, 24, 25, 28, 29 and 32 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Examiner states the claimed invention lacks written description under current written description guidelines. The Examiner states the claims are drawn to maize progeny plants and transgenic maize plants having undisclosed identifying characteristics whereby only the characteristics of the deposited maize line 39J26 are known. The Examiner further states the effect of transgenes on the physiological and morphological characteristic of a transgenic 39J26 maize plant or progeny thereof, is not sufficiently described whereby one of skill in the art could recognize the claimed maize plant. The Examiner states that while claims 11, 15, 19, 24, 28 and 32 set forth at least two 39J26 traits, because the terms used to described the traits are relative terms, lacking a comparative basis, these traits do not adequately define or distinguish 39J26 progeny maize plants.

Applicants respectfully traverse this rejection. Applicants have amended claims 11, 15, 19, 24, 28 and 32 by adding the threshold, having 50% of the ancestral alleles, that limits the variation permitted among the genus, as well as an assayable function, capable of expressing at least a combination of two traits of 39J26. There is literal support for the amended claims found in the specification on page 3 and beginning on page 28 of the instant specification. Plant breeding techniques known in the art and used in the maize plant breeding program include, but are not limited to the following: recurrent selection backcrossing, pedigree breeding, restriction length polymorphism enhanced selection, genetic marker enhanced selection and transformation. With the amendments to the above-stated claims, Applicants have identified a transgenic 39J26 plant (claim 12), a 39J26 plant further comprising genes transferred by backcrossing (claim 14),

or a maize plant wherein at least one ancestor is maize variety 39J26 (claim 15) by defining a particular threshold that limits variation and reciting a functional test to identify such plants. In addition, Applicants have drafted new claims 33-41 which Applicants believe come within the purview of the written description requirement and do not add new matter. Under the written description requirement, Applicants should be allowed to claim the progeny of a cross of maize plants crossed with 39J26 with phenotypic characteristics since distinguishing identifying characteristics in the chemical and biotechnological arts, dealing with DNA, are those such as: partial structure, physical and/or chemical properties, functional characteristics, known or disclosed correlation between structure and function, method of making, and combinations of the above. In plants, these identifying characteristics are those detectable in the phenotype which are manifested through gene expression. Claims to a particular species of invention are adequately described if the disclosure of relevant identifying characteristics are present in the application. Again, one of ordinary skill in the art is reasonably apprised in knowing that a plant crossed with 39J26 will result in a plant having half of the genetic contribution of 39J26. A further limitation set by Applicants is that the plants must be capable of expressing a combination of at least two phenotypic characteristics of 39J26.

Further, Applicants assert the specification supplies an extensive definition and description of 'transgene' and transgenes of interest. (See generally pages 23-28 and pages 28-31 for an extensive list of potential transgenes.) Applicants also note, a person having skill in the art could insert a DNA gene into a selected maize plant. Applicants have defined transgenes in the present application in the paragraph that spans pages 23-24 as follows:

With the advent of molecular biological techniques that have allowed the isolation and characterization of genes that encode specific protein products, scientists in the field of plant biology developed a strong interest in *engineering the genome of plants to contain and express foreign genes, or additional genes* (perhaps driven by different promoters) in order to alter the traits of a plant in a specific manner. *Such foreign, additional and/or modified genes are referred to herein collectively as "transgenes".* Over the last fifteen to twenty years several methods for producing transgenic plants have been developed, and *the present invention, in particular embodiments, also relates to transgenic versions of the claimed hybrid 39J26.*

(emphasis added) The present application clearly describes and defines a transgene to be a gene transferred into a plant wherein the product of that gene is expressed. This expression will confer

a new or improved trait into that plant. However, this gene is but a tiny fraction of the entire genome. In other words, the plant of claim 12 is distinguishable from the prior art plants just as is hybrid 39J26 without the transgenes. Further, the plant of claim 12 also contains a trait(s) that is either improved or additional to the traits of the maize plant of claim 2. The 39J26-transgene plant still expresses the unique combination of traits of 39J26 without the transgenes with the exception of the traits expressed by the transgenes. The trivial modifications introduced by the transgenes to the unique invention of 39J26 are clearly supported and described in the present application.

In addition, Applicants respectfully submit that "[t]he test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification. . . . If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more. . . . The degree of precision necessary for adequate claims is a function of the nature of the subject matter." Miles Laboratories, Inc. v. Shandon Inc., 997 F.2d 870 (Fed. Cir. 1993).

Claims 13, 14, 17, 18, 26, 27, 30 and 31 stand rejected as containing subject matter which is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner states the Applicants have failed to adequately describe the maize plant at claims 12, 16, 25 and 29 and the methods for developing a maize plant in a maize plant breeding of the instant claims are not enabled.

Applicants respectfully traverse this rejection and submits that the claims have now been amended to properly be drawn from a method thereby obviating this rejection. In addition, Applicants direct the Examiner to the detailed assertions supra, whereby Applicants disclose how and where the specification has adequately described the maize plants of claims 12, 16, 25 and 29.

In light of the above remarks, Applicants submit that claims 11, 12, 15, 16, 19, 24, 25, 28, 29 and 32 clearly describe and distinctly claim the subject matter Applicants regard as the invention. Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, first paragraph.

Issues Under 35 U.S.C. § 102/103

Claims 11, 15, 19, 24, 28, and 32 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Weber (U.S. Patent 6,018,113). The Examiner states that Weber discloses "a hybrid maize plant designated 38W36". The Examiner further states that 38W36 hybrid maize plant inherently discloses such relative traits as "excellent silage yield potential" and "excellent grain yield potential". The Examiner concludes stating that the claimed invention is *prima facie* obvious as a whole to one of ordinary skill in the art at the time it was made, if not anticipated by Weber.

Applicants respectfully traverse this rejection and requests reconsideration of claims 11, 15, 19, 24, 28, and 32. The Applicants would like to point out that the inventions 39J26 and 38W36 are not the same inventions. Nor are their differences minor morphological variations. Applicants submit that the claimed plant cannot be rendered obvious as it possesses a unique combination of traits which confers a unique combination of genetics. Moreover, Applicants claim a method of making a plant which did not previously exist. Pursuant to the recent Federal Circuit decision, Elan Pharmaceuticals, Inc. v. Mayo Foundation for Medical Education & Research, No. 00-1467 (Fed. Cir. Aug. 30, 2002), "a novel patented product is not "anticipated" if it did not previously exist." *Id.* This is the case whether or not the process for making the new product is generally known. *Id.* The invention 39J26 has not previously existed as it is the result of the crossing the two maize inbred lines GE515243 and GE515344.

Furthermore, when looking at the tables of both inventions, hybrids created using 39J26 as one of the parents are clearly not anticipated by hybrids made using 38W36 as one of the parents. The inventions 39J26 and 38W36 differ for various traits that are not minor. For example, 39J26 has a relative maturity based on the Comparative Relative Maturity Rating System as reported in Table 3, of 80 (page 20). As reported in Table 2 of 6,018,113 Patent, 38W36 demonstrates a 93 relative maturity. Another example, as reported in Table 1, 39J26 has a superior resistance to Head Smut of 9 (page 16). As reported in Table 2 of the 6,018,113 Patent, 38W36 demonstrates a resistance of 8. A third example of the differences is that 39J26 exhibits a superior resistance to Gray Leaf Spot than 38W36. As reported in Table 1, 39J26 has a resistance of 6. As reported in Table 1, 38W36 has a resistance of 4.

The aforementioned examples all illustrate that there are large differences between 39J26 and 38W36. The examples listed are not exhaustive but they do give ample evidence that the inventions are not the same. Furthermore, when looking at the tables of both inventions, hybrids created using 39J26 as one of the parents are clearly not anticipated by hybrids made using 38W36 as one of the parents.

Applicants further submit that the claims do not simply recite traits, but instead recites these specific traits only to the extent that they are "39J26" traits; thereby being derived from the seed/germplasm of 39J26. Note, variety with respect to agricultural variety, can be defined as a group of similar plants that by structural features and performance can be identified from other varieties within the same species. When looking at maize plants it would be possible for one ordinarily skilled in the art to find many traits that are similar between varieties such as the disease resistance or growth habit. Nonetheless, the claim also recites that the claimed plant must have 39J26 as an ancestor further indicating that these traits must originate from the 39J26 plant not 38W36. In response to the Examiner's contention that one could not distinguish the claimed plant from the prior art which shows each of these traits, Applicants submit that one can easily tell by reference to the plants breeding history, which can be confirmed by its molecular profile whether the plant did indeed have plant 39J26 as an ancestor and expressed two or more "39J26" traits. Further, any phenotypic trait that is expressed is a result of a combination of all of the genetic material present in the plant, and 39J26 will have its own unique genetic background that will give rise to the claimed plant and this profile along with its combination with other plants will result in a unique combined genetic profile that is the product claimed.

Furthermore, there is no expectation of success that the crossing of the Hybrid 38W36 with some yet to be identified plant would yield a plant with two of the traits enumerated in the claimed invention and at least 50% of its ancestral alleles from 39J26 because that particular plant did not begin with the claimed seed 39J26 which is essential. Applicants assert that it is not the phenotypic characteristics alone that are claimed and taught in the instant invention. It is a combination of physiological and morphological characteristics, as claimed, which make the present Hybrid non-obvious and not anticipated over Weber. Further, In re Thorpe, states that "a product by process claim may be properly rejected over prior art teaching the same product produced by a different process", as noted by the Examiner. 227 U.S.P.Q. 964, 966 (Fed. Cir.

1985). However, Applicants submit that this is not the same product physiologically or morphologically as the cited prior art as can be evidenced by one skilled in the art through analysis of the data tables in each. In addition, it is impermissible to use hindsight reconstruction and the benefit of Applicants' disclosure to pick among pieces which are present in the art, there must be some suggestion to make the combination and an expectation of success. In re Vaack, 20 U.S.P.Q.2d 1434 (Fed. Cir. 1991). Further, any phenotypic trait that is expressed is the result of the genetic material present in the plant, and 39J26 will have its own unique genetic background that will give rise to the claimed plant and this profile along with its combination with other plants will result in a unique combined genetic profile that is the product claimed. Thus, the present application deserves to be considered new and non-obvious compositions in their own right as products of crossing when 39J26 is used as a starting material.

In light of the above, Applicants respectfully request the Examiner reconsider and withdraw the rejection to claims 11, 15, 19, 24, 28, and 32 under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Weber (U.S. Patent 6,018,113).

Issues Under 35 U.S.C. § 103

Claims 11, 15, 19, 24, 28, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weber (U.S. Patent 6,018,113). The Examiner states the "claims are drawn to a hybrid maize plant that would have been *prima facie* obvious to one of ordinary skill in the art".

Applicants respectfully traverse this rejection. When looking at a maize plant it would be possible to find many traits that are similar between varieties such as the color of flowers or growth habit. However, to say there are similarities in phenotype between two varieties is not the same as saying that the two varieties have the same morphological and physiological characteristics as a whole, or that one is an obvious variant of the other. Further, similarity in phenotype does not mean that the two varieties will perform similarly, particularly in a breeding program. As stated above, variety with respect to agricultural variety may be defined as a group of similar plants that by structural features and performance can be identified from other varieties within the same species.

Applicants submit that Hybrid 38W36 does not exhibit the same characteristics as 39J26. Applicants will illustrate how 39J26 and 38W36 are different. It must be recognized that the hybrids provided by this invention are themselves unusual and unobvious results of a common process, in that they provide the unique combination of "excellent silage yield potential" and "excellent grain yield potential" (see pages 15-22, specification). Nonetheless, Hybrid 39J26 deserves to be considered as a new and non-obvious composition in its own right as does its tissue culture as products of the process when 39J26 is used as starting material. Applicants point out that 39J26 is a unique plant hybrid which never before existed until Applicants filed the application and until its deposit of the same. While Weber does teach the general regeneration of maize plants from tissue culture techniques, it does not teach or suggest the use of the unique maize hybrid 39J26. As will be demonstrated below, several morphological and physiological characteristics of Hybrid 39J26 are either different from or not present in 38W36.

For example, Hybrid 39J26 has above superior resistance to Head Smut while 38W36 is less resistant to the disease. The varieties are also different with respect to Relative Maturity, Staygreen, test weight and disease resistance. Differences between the two varieties are summarized in the table below:

<u>CHARACTERISTICS</u>	<u>39J26</u>	<u>38W36</u>
Comparative Relative Maturity Rating System	80	93
Staygreen	5	7
Test weight	7	5
Disease Resistance	Superior Resistance to Head Smut (9)	Resistance to Head Smut (8)

This comparison clearly shows that 38W36 does not exhibit the characteristics of hybrid 39J26. Further, the present application clearly shows in Table 1 at pages 16-17 and Tables 2-4 at pages 17-22 that hybrid 39J26 exhibits more resistance to Head Smut, lower Staygreen, more resistance to Gibberella Ear Rot and the aforementioned characteristics. This unique and unobvious combination of traits makes hybrid 39J26 particularly well suited to the Pacific Northwestern region of the United States and bordering area of Canada and to Northern Europe.

In light of the above, Applicants respectfully request the Examiner reconsider and withdraw the rejection to claims 11, 15, 19, 24, 28, and 32 under 35 U.S.C. § 103(a).

Conclusion

In conclusion, Applicants submit in light of the above amendments and remarks, the claims as amended are in a condition for allowance, and reconsideration is respectfully requested.

No additional fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



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Application No. 09/542,618

**AMENDMENT — VERSION WITH MARKINGS
TO SHOW CHANGES MADE**

In the Specification

Please replace the paragraph at page 7, following "SUMMARY OF THE INVENTION", beginning at line 23 with the following:

According to the invention, there is provided a hybrid maize plant, designated as 39J26, produced by crossing two Pioneer Hi-Bred International, Inc. proprietary inbred maize lines GE515243 and GE515344. These lines, deposited with the American Type Culture Collection, (ATCC), Manassas, Virginia 20110, have accession number [] PTA-4280 deposited on May 6, 2002, for GE515243 and accession number [] PTA-4342 deposited on May 13, 2002, for GE515344. This invention thus relates to the hybrid seed 39J26, the hybrid plant produced from the seed, and variants, mutants and trivial modifications of hybrid 39J26. This invention also relates to methods for producing a maize plant containing in its genetic material one or more transgenes and to the transgenic maize plants produced by that method. This invention further relates to methods for producing maize lines derived from hybrid maize line 39J26 and to the maize lines derived by the use of those methods. This hybrid maize plant is characterized by very high silage yield for its maturity in combination with excellent feeding value and starch concentration.

Please replace the paragraph beginning at page 37, line 2 with the following:

[A deposit of the seed of hybrid 39J26 is and has been] Applicant has made a deposit of at least 2500 seeds of Hybrid Maize Line 39J26 with the American Type Culture Collection (ATCC), Manassas, Va. 20110 USA. ATCC Deposit No. PTA-4266. The seeds deposited with the ATCC on May 3, 2002 were taken from the deposit maintained by Pioneer Hi-Bred International, Inc., 800 Capital Square, 400 Locust Street, Des Moines, Iowa 50309-2340, since prior to the filing date of this application. Access to this deposit will be available during the pendency of the application to the Commissioner of Patents and Trademarks and person determined by the Commissioner to be entitled thereto upon request. Upon allowance of any

claims in the application, the Applicant(s) will make available to the public without restriction a deposit of at least 2500 seeds of hybrid 39J26 with the American Type Culture Collection (ATCC), [Manassas, Virginia 20110] 10801 University Boulevard, Manassas, VA 20110-2209. The seeds deposited with the ATCC will be taken from the same deposit maintained at Pioneer Hi-Bred and described above. Additionally, Applicant(s) will meet all the requirements of 37 C.F.R. § 1.801 - 1.809, including providing an indication of the viability of the sample when the deposit is made. This deposit of Hybrid Maize Line 39J26 will be maintained without restriction in the ATCC Depository, which is a public depository, for a period of 30 years, or 5 years after the most recent request, or for the enforceable life of the patent, whichever is longer, and will be replaced if it ever becomes nonviable during that period. Applicant will impose no restrictions on the availability of the deposited material from the ATCC; however, Applicant has no authority to waive any restrictions imposed by law on the transfer of biological material or its transportation in commerce. Applicant does not waive any infringement of its rights granted under this patent or under the Plant Variety Protection Act (7 USC 2321 et seq.) which may protect Hybrid Maize Line 39J26.

In the Claims

Please amend claims 1, 5-8, 10-12, 14-16, 18-21, 23-25, 27-29 and 31-32 as follows:

1. (Amended)

Hybrid maize seed designated 39J26, representative seed of said hybrid 39J26 having been deposited under ATCC accession number [] PTA-4266.

5. (Amended)

A tissue culture of regenerable cells of a hybrid maize plant 39J26, representative seed of said hybrid maize plant 39J26 having been deposited under ATCC accession number PTA-4266 [], wherein the tissue regenerates plants capable of expressing all the morphological and physiological characteristics of said hybrid maize plant 39J26].

6. (Amended)

[A] The tissue culture according to claim 5, the cells or protoplasts of said cells having been isolated from a tissue [being from a tissue] selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

7. (Amended)

A maize plant, or its parts, regenerated from the tissue culture of claim 5 and capable of expressing all the morphological and physiological characteristics of hybrid maize plant 39J26, representative seed having been deposited under ATCC accession number [] PTA-4266.

8. (Amended)

The maize plant of claim 2 wherein said plant [is male sterile] further comprises a genetic factor conferring male sterility.

10. (Amended)

The [maize plant breeding program] method of claim 9 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

11. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 2, wherein said maize plant has derived at least 50% of its ancestral alleles from 39J26 [said maize plant] and is capable of expressing a combination of at least two 39J26 traits selected from the group consisting of: a relative maturity of approximately 80 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, excellent silage yield potential, excellent grain yield potential, high energy content for whole plant silage, excellent seedling vigor, excellent starch content of the whole plant, early flowering, and particularly suited to the Pacific Northwestern region of the United States and bordering area of Canada and to Northern Europe.

12. (Amended)

[A] The hybrid maize plant according to claim 2, wherein the genetic material of said plant contains one or more transgenes.

14. (Amended)

The [maize plant breeding program] method of claim 13 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

15. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 12, wherein said maize plant has derived at least 50% of its ancestral alleles from 39J26 [said maize plant] and is capable of expressing a combination of at least two 39J26 traits selected from the group consisting of: a relative maturity of approximately 80 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, excellent silage yield potential, excellent grain yield potential, high energy content for whole plant silage, excellent seedling vigor, excellent starch content of the whole plant, early flowering, and particularly suited to the Pacific Northwestern region of the United States and bordering area of Canada and to Northern Europe.

16. (Amended)

[A] The hybrid maize plant according to claim 2, wherein the genetic material of said plant contains one or more genes transferred by backcrossing.

18. (Amended)

The [maize plant breeding program] method of claim 17 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

19. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 16, wherein said maize plant has derived at least 50% of its ancestral alleles from 39J26 [said maize plant] and is capable of expressing a combination of at least two 39J26 traits selected from the group consisting of: a relative maturity of approximately 80 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, excellent silage yield potential, excellent grain yield potential, high energy content for whole plant silage, excellent seedling vigor, excellent starch content of the whole plant, early flowering, and particularly suited to the Pacific Northwestern region of the United States and bordering area of Canada and to Northern Europe.

20. (Amended)

A maize plant, or its parts, having all of the morphological and physiological characteristics of the plant of claim 2.

21. (Amended)

The maize plant of claim 20 wherein said maize plant [is male sterile] further comprises a genetic factor conferring male sterility.

23. (Amended)

The [maize plant breeding program] method of claim 22 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

24. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 20, wherein said maize plant has derived at least 50% of its ancestral alleles from 39J26 [said maize plant] and is capable of expressing a combination of at least two 39J26 traits selected from the group consisting of: a relative maturity of approximately 80 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, excellent silage yield potential, excellent grain yield potential, high energy content for whole plant silage, excellent seedling vigor, excellent starch content of the whole plant, early flowering, and particularly suited to the Pacific Northwestern region of the United States and bordering area of Canada and to Northern Europe.

25. (Amended)

[A] The hybrid maize plant according to claim 20, wherein the genetic material of said plant contains one or more transgenes.

27. (Amended)

The [maize plant breeding program] method of claim 26 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

28. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 25, wherein said maize plant has derived at least 50% of its ancestral alleles from 39J26 [said maize plant] and is capable of expressing a combination of at least two 39J26 traits selected from the group consisting of: a relative maturity of approximately 80 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, excellent silage yield potential, excellent grain yield potential, high energy content for whole plant silage, excellent seedling vigor, excellent starch content of the whole plant, early flowering, and

particularly suited to the Pacific Northwestern region of the United States and bordering area of Canada and to Northern Europe.

29. (Amended)

[A] The hybrid maize plant according to claim 20, wherein the genetic material of said plant contains one or more genes transferred by backcrossing.

31. (Amended)

The [maize plant breeding program] method of claim 30 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

32. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 29, wherein said maize plant has derived at least 50% of its ancestral alleles from 39J26 [said maize plant] and is capable of expressing a combination of at least two 39J26 traits selected from the group consisting of: a relative maturity of approximately 80 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, excellent silage yield potential, excellent grain yield potential, high energy content for whole plant silage, excellent seedling vigor, excellent starch content of the whole plant, early flowering, and particularly suited to the Pacific Northwestern region of the United States and bordering area of Canada and to Northern Europe.

Please add new claims 33 – 41 as follows:

33. (New)

A method of making a hybrid maize plant designated 39J26 comprising:
crossing an inbred maize plant GE515243, deposited as PTA-4280 with a second inbred maize
plant GE515344, deposited as PTA-4342; and
developing from the cross a hybrid maize plant representative seed of which having been
deposited under ATCC Accession Number PTA-4266.

34. (New)

A method of making an inbred maize plant comprising:
obtaining the plant of claim 2 and
applying double haploid methods to obtain a plant that is homozygous at
essentially every locus, said plant having received all of its alleles from maize hybrid
plant 39J26.

35. (New)

A method for producing an 39J26 progeny maize plant comprising:
(a) growing the plant of claim 2, and obtaining self or sib pollinated seed therefrom; and
(b) producing successive filial generations to obtain a 39J26 progeny maize plant.

36. (New)

A maize plant produced by the method of claim 35, said maize plant having received all
of its alleles from hybrid maize plant 39J26.

37. (New)

The maize plant of claim 36 wherein said maize plant comprises 2 or more 39J26
characteristics described in Table 1 or 2 or 3 or 4.

38. (New)

A method for producing a population of 39J26 progeny maize plants comprising:

- (a) obtaining a first generation progeny maize seed produced by crossing the maize plant of claim 2 with a second maize plant;
- (b) growing said first generation progeny maize seed to produce F_1 generation maize plants and obtaining self-pollinated seed from said F_1 generation maize plants; and
- (c) repeating the steps of growing and harvesting successive filial generations to obtain a population of 39J26 progeny maize plants.

39. (New)

The population of 39J26 progeny maize plants produced by the method of claim 38, said population, on average, deriving at least 50% of its ancestral alleles from 39J26.

40. (New)

A 39J26 maize plant selected from the population of 39J26 progeny maize plants produced by the method of claim 38, said maize plant deriving at least 50% of its ancestral alleles from 39J26.

41. (New)

The method of claim 38, further comprising applying double haploid methods to said F_1 generation maize plant or to a successive filial generation thereof.